

In the United States Patent and Trademark Office

In re the application of:

Kulvir Bhogal

Filed: October 23, 2003

Group Art Unit: 2174

For: Method, apparatus and
computer program product
for deploying software via
post-load images

Examiner: Anil N. Kumar

Appl. No.

10/692,143

Appellant's Docket:

AUS920030492US1

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

REAL PARTY IN INTEREST

The assignee, International Business Machines Corporation, is the real party in interest.

RELATED APPEALS AND INTERFERENCES

This is the first appeal in the present patent application. There are no related appeals or interferences known to the appellant or its legal representative.

STATUS OF CLAIMS

Claims 8, and 10-21 are pending in the application. Claims 1-7 and 9 have been canceled. All the pending claims stand rejected. Office action (the “final Office action”), August 20, 2007 and Advisory Action, November 1, 2007. Appellant has appealed from the final rejection. Notice of Appeal, filed November 19, 2007.

The claims appealed herein, and for which arguments are herein presented, are claims 8, 13, 15 and 20.¹

The present application, filed October 23, 2003, presented claims 1-21.

In a preliminary amendment, filed September 12, 2004, claims 1-3, 5-9, 12-17, and 19-21 were amended to correct informalities and dependencies.

In a non-final Office action of March 28, 2007, claims 15-21 were rejected under 35 USC. 101 on grounds that the claimed invention is directed to non-statutory subject matter and claims 1-21 were rejected under 35 USC. 102(b) as being unpatentable over US patent 6,151,643 (Cheng).

In Rely A, filed June 28, 2007, Appellant amended claim 15 to overcome the 101 rejection and submitted amendments and arguments to claims 1, 8 and 15 to overcome the 102(b) rejections.

In a preliminary amendment of August 8, 2007, Appellant canceled all method claims, which were claims 1-7.

On August 20, 2007, a final rejection (the Final Office Action”) maintained the prior rejections.

Appellant appealed the rejection in a Notice of Appeal filed November 19, 2007.

¹ Arguments are *not* herein presented regarding all claims remaining in the present application. However, Appellant contends, of course, that all claims are allowable at least because they depend on claims for which arguments are herein presented and which Appellant contends are allowable. MPEP 2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)).

STATUS OF AMENDMENTS

Amendments to claims 8 and 15 are submitted herein in connection with this appeal. The claims in the Claim Appendix herein are marked to indicate the amendments herein submitted.

In a Request for Reconsideration of October 15, 2007, Appellant submitted amendments to claims 8 and 15 because Appellant noticed that the claims lacked sufficient antecedent basis for their respective first uses of the term “post-load images.” A formal rejection has never been issued based on this error.

In Advisory Action of November 1, 2007, Examiner Kumar elected not to enter the amendments on grounds that they would require further consideration and searches.

In a telephone interview on November 13, 2007, Applicant discussed this and reached agreement that Examiner Kumar will enter the amendments submitted herein in connection with this Appeal Brief, since the amendments submitted herein present subject matter that has already been considered and for which searches have already been conducted.

The following prosecution history for the present case makes clear that amendments submitted herein present subject matter that has already been considered and for which searches have already been conducted. Specifically, Appellant explained in the November 13 telephone interview that claims 8 and 15 already recited the term “post-load images” in a limitation prior to the time of examination for the Final Office Action.² The issue is merely that at the time of examination, claims 8 and 15 incorrectly introduced this limitation with the statement that “the first computer system has a pre-built array of *software images* stored thereon for combinations of hardware and the software that the user may select” (emphasis added). That is, it was intended that the claims recite “a pre-built array of post-load images

² The term was presented in a lengthy limitation stating that “the respective *post-load images* being substantially identical to respective images resulting on a target computer system hard drive from an installation process of corresponding pre-load images, so that the respective *post-load images* include software application configuration information, files from the corresponding pre-load images, and links to drivers for hardware of the target system” (emphasis added).

stored thereon” instead of reciting “a pre-built array of software images stored thereon.” Consequently, in claims 8 and 15, the first use of the term “post-load images” had insufficient antecedent basis. Neither Appellant nor Examiner noticed this error until Appellant noticed it after the final rejection. A formal rejection has never been issued based on this error.

Furthermore, prior to the time of examination for the first Office action, claim 1 *correctly* introduced the term “post-load images” by reciting that the method of claim 1 includes “providing a Web site on a computer system coupled to a network for presenting a user with an interface, wherein the computer system has *an array of pre-built, post-load images stored thereon* for combinations of hardware and the software that the user may select” (emphasis added). Indeed, the Final Office Action, item 2, pages 2 and 3, set out the language of claim 1 for claim 8, reciting “wherein the computer system has an array of pre-built, *post-load images/executables* stored thereon for combinations of hardware and the software that the user may select” (emphasis added).

Thus, at least the initial search conducted for the first Office action included a search for a computer system having “an array of pre-built, post-load images stored thereon for combinations of hardware and the software that the user may select” and the search conducted for the second Office action included a search for post-load images “substantially identical to respective images resulting on a target computer system hard drive from an installation process of corresponding pre-load images, so that the respective post-load images include software application configuration information, files from the corresponding pre-load images, and links to drivers for hardware of the target system.”

For all these reasons, the amendments submitted herein present subject matter that has already been considered and for which searches have already been conducted. Consequently, agreement has been reached that the amendments should be entered.

SUMMARY OF CLAIMED SUBJECT MATTER

The present application states that "... a need exists to provide a service that involves the user more directly in software deployment and to deploy the software to the user in a form that supports simplified computer set up." Present application, page 2, lines 14-17

The application goes on to state the following:

The foregoing need is addressed in the present invention as follows. A method for deploying software includes providing, for a service provider, a Web site on a computer system coupled to a network for presenting a user with an interface. A computer system of the service provider's, which may or may not be the same system as to one hosting the Web site, has an array of images stored thereon for combinations of the software and hardware that the user may select. These images are *not* mere pre-load images, such as are conventionally provided for user installation. Rather, these images are "post-load" images, sometimes also referred to as "ghost" images. That is, while a post-load image may be compressed, keyed, or encrypted, the image is otherwise essentially identical to the image on a target computer system hard drive that results from the conventional installation process of a pre-load image, in which files in addition to those of the pre-load image are created, software applications of the pre-load image are configured, files are linked with drivers for hardware of the target system, etc. The Web site is operable to receive a user selection of software applications for deploying to a target computer system and of hardware for the target system and responsively determine what drivers correspond to the indicated hardware. The provider's system then selects a certain one of the post-load images having the software applications that have been selected by the user and has the drivers particular to the hardware that has been selected by the user.

Present application, page 3, lines 2-18.

Claim 8

Claim 8 describes an apparatus for deploying software. The apparatus comprises a processor and a memory for storing program instructions executable by the processor. The claim includes steps, as follows:

First step: providing a Web site on a first computer system coupled to a network for presenting a user with an interface.

Second step: receiving from the user a selection of software applications for deploying to a target computer system.

Third step: receiving from the user a selection of hardware for the target system and responsively determining what drivers correspond to the indicated hardware, wherein the first computer system has a pre-built array of post-load software images stored thereon for combinations of hardware and the software that the user may select, the respective post-load images being substantially identical to respective images resulting on a target computer

system hard drive from an installation process of corresponding pre-load images, so that the respective post-load images include software application configuration information, files from the corresponding pre-load images, and links to drivers for hardware of the target system.

Fourth step: selecting a certain one of the pre-built images by the first computer system responsive to the received user selections, wherein the selected image has the software applications selected by the user and the drivers for the hardware selected by the user.

Fifth step: receiving a first order from the user for the certain image of the selected software applications deployable to the target computer system hardware, including a selection by the user of a method for delivery of the selected image.

Sixth step: sending the user a loading utility with the selected image, wherein such a loading utility enables transferring the post-load image to the target computer system without relying on the target computer system having an operating system shell or boot diskette, and wherein responsive to execution of the loading utility by the target computer system, the target computer system erases the hard drive and transfers the post-load image to the target computer system.

The specification of the present application provides an exemplary embodiment of the invention. The specification describes the apparatus of claim 8 in terms of that embodiment. Specifically, regarding support for claim 8, see original published application, Fig. 5, paragraph 0035 (an apparatus 510 for deploying software, comprising a processor 515); see original published application, Fig. 5, paragraphs 0034, 0035 (a memory 527, 529 for storing program instructions executable by the processor 515); see original published application, Fig.'s 1 and 4, paragraph 0027 (providing a Web site 405 on a first computer system coupled to a network for presenting a user 150 with an interface); see original published application, Fig.'s 1 and 4, paragraphs 0017, 0031 (receiving 425 from the user 150 a selection of software applications 120 for deploying to a target computer system 125); see original published application, Fig.'s 1 and 4, paragraphs 0018, 0031 (receiving 425 from the user 150 a selection of hardware for the target system 125); see original published application, Fig.'s 1 and 4, paragraphs 0018, 0032 (responsively determining 430 what drivers 140 correspond to the indicated hardware); see original published application, Fig.'s 1, 2, and 3, paragraphs 0019, 0032 (wherein the first computer system has a pre-built array of post-load software

images 210 stored thereon for combinations of hardware and the software 120 that the user 150 may select, the respective post-load images 210 being substantially identical to respective images resulting on a target computer system 125 hard drive 320 from an installation process of corresponding pre-load images 210); see original published application, Fig.'s 1 and 2, paragraphs 0030, 0031, and 0032 (so that the respective post-load images 210 include software application configuration information, files from the corresponding pre-load images 210, and links to drivers 140 for hardware of the target system 125); see original published application, Fig.'s 1 and 2, paragraphs 0020, 0033 (selecting a certain one of the pre-built images 210 by the first computer system responsive to the received user selections wherein the selected image 210 has the software applications 120 selected by the user 150 and the drivers 140 for the hardware selected by the user 150); see original published application, Fig.'s 1, 2, and 4, paragraphs 0020, 0033 (receiving a first order 435 from the user 150 for the certain image of the selected software applications 120 deployable to the target computer system 125 hardware including a selection by the user 150 of a method for delivery 435 of the selected image 210); see original published application, Fig.'s 1, 2, and 3, paragraphs 0021, 0033 (sending the user 150 a loading utility 315 with the selected image 210); see original published application, Fig.'s 1, 2, and 3, paragraph 0021 (wherein such a loading utility 315 enables transferring the post-load image 210 to the target computer system 125 without relying on the target computer system 125 having an operating system shell or boot diskette); see original published application, Fig.'s 1, 2, and 3, paragraph 0022 (and wherein responsive to execution of the loading utility 315 by the target computer system 125 the target computer system 125 erases the hard drive 320 and transfers the post-load image 210 to the target computer system 125).

Claim 13

Claim 13 describes an embodiment of claim 8, wherein the apparatus comprises a processor and a memory for storing program instructions executable by the processor. The claim includes steps, as follows:

First step: maintaining a record of the order for the software applications and drivers included in the certain image that is sent, wherein the record is associated with an order identifier and user identifier.

Second step: receiving a second order for the user, including the user or order identifier.

Third step: retrieving the record for the first order responsive to the user or order identifier.

Fourth step: presenting, responsive to the user or order identifier, a list of suggested software programs for the second order in addition to those of the first order.

Regarding support for claim 13, see original published application, Fig.'s 1 and 2, paragraph 0028 (maintaining a record 250 of the order for the software applications 120 and drivers 140 included in the certain image that is sent, wherein the record 250 is associated with an order identifier 252 and user identifier 254); Fig.'s 1, 2, and 4, paragraph 0031 (receiving 435 a second order for the user 150, including the user or order identifier 252); Fig. 2, paragraph 0029 (retrieving the record 250 for the first order responsive to the user or order identifier 252); Fig.'s 1 and 2, paragraph 0030 (presenting, responsive to the user or order identifier 252, a list of suggested software programs 120 for the second order in addition to those of the first order).

Claim 15

Claim 15 describes a computer program product for deploying software. The specification of the present application provides an exemplary embodiment of the invention. The specification describes the computer program product of claim 15 in terms of that embodiment. Specifically, regarding support for claim 15, see original published application, Fig.'s 1 and 5, paragraphs 0034, 0035, 0039 (A computer program product, stored on a physical, computer readable medium, for deploying software 120, said computer program product having instructions for execution by a computer wherein the instructions cause the computer to implement a method when executed by the computer); see original published application, Fig.'s 1 and 4, paragraph 0027 (instructions for providing a Web site 405 on a first computer system coupled to a network for presenting a user 150 with an interface); see

original published application, Fig.'s 1 and 4, paragraphs 0017, 0031 (instructions for receiving 425 from the user 150 a selection of software applications 120 for deploying to a target computer system 125); see original published application, Fig.'s 1 and 4, paragraphs 0018, 0031 (instructions for receiving 425 from the user 150 a selection of hardware for the target system 125); see original published application, Fig.'s 1 and 4, paragraphs 0018, 0032 (responsively determining 430 what drivers 140 correspond to the indicated hardware); see original published application, Fig.'s 1, 2, and 3, paragraphs 0019, 0032 (wherein the first computer system has a pre-built array of post-load software images 210 stored thereon for combinations of hardware and the software 120 that the user 150 may select the respective post-load images 210 being substantially identical to respective images 210 resulting on a target computer system 125 hard drive 320 from an installation process of corresponding pre-load images 210); see original published application, Fig.'s 1 and 2, paragraphs 0030, 0031, and 0032 (so that the respective post-load images 210 include software application configuration information, files from the corresponding pre-load images 210, and links to drivers 140 for hardware of the target system 125); see original published application, Fig.'s 1 and 2, paragraphs 0020, 0033 (instructions for selecting a certain one of the pre-built images 210 by the first computer system responsive to the received user 150 selections, wherein the selected image 210 has the software applications 120 selected by the user 150 and the drivers 140 for the hardware selected by the user 150); see original published application, Fig.'s 1, 2, and 4, paragraphs 0020, 0033 (instructions for receiving 435 a first order from the user 150 for the certain image of the selected software applications 120 deployable to the target computer system 125 hardware, including a selection by the user 150 of a method for delivery 435 of the selected image 210); see original published application, Fig.'s 1, 2, and 3, paragraphs 0021, 0033 (instructions for sending the user 150 a loading utility 315 with the selected image 210); see original published application, Fig.'s 1, 2, and 3, paragraph 0021 (wherein such a loading utility 315 enables transferring the post-load image 210 to the target computer system 125 without relying on the target computer system 125 having an operating system shell or boot diskette); see original published application, Fig.'s 1, 2, and 3, paragraph 0022 (and wherein responsive to execution of the loading utility 315 by the target computer system 125, the target

computer system 125 erases the hard drive 320 and transfers the post-load image 210 to the target computer system 125).

Claim 16

Claim 16 describes an embodiment of claim 15 wherein the computer program product comprises further instructions. Regarding support for claim 16, see original published application, Fig.'s 1 and 4, paragraph 0029 (instructions for receiving 435 a first order from the user 150 for the certain image of the selected software applications 120 deployable to the target system 125 hardware); Fig.'s 1, 2, and 4, paragraph 0033 (including a selection by the user 150 of a method for delivery 435 of the selected image 210); Fig.'s 1, 2, and 3, paragraph 0033 (instructions for sending the user 150 a loading utility 315 with the selected image 210); Fig.'s 1 and 3, paragraph 0033 (wherein such a loading utility 315 enables transferring the image to the target computer system 125 without relying on the target computer system 125 having an operating system shell or boot diskette).

Claim 20

Claim 20 describes an embodiment of claim 16 which is dependent on claim 15, wherein the computer program product comprises further instructions. Regarding support for claim 20, see original published application, Fig.'s 1 and 2, paragraph 0028 (instructions for maintaining a record 250 of the order for the software applications 120 and drivers 140 included in the certain image that is sent, wherein the record 250 is associated with an order identifier 252 and user identifier 254); Fig.'s 1, 2, and 4, paragraph 0031 (instructions for receiving 435 a second order for the user 150, including the user or order identifier 252); Fig. 2, paragraph 0029 (instructions for retrieving the record 250 for the first order responsive to the user or order identifier 252); Fig.'s 1 and 2, paragraph 0030 (instructions for presenting, responsive to the user or order identifier 252, a list of suggested software programs 120 for the second order in addition to those of the first order).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Is the rejection in the Final Office Action proper, wherein claims 8 and 15 are rejected under 35 U.S.C. 102(b) as being unpatentable over US Patent 6,151,643 to Cheng (hereinafter “Cheng”)?

2. Is the rejection in the Final Office Action proper, wherein claims 13 and 20 are rejected under 35 U.S.C. 102(b) as being unpatentable over US Patent 6,151,643 to Cheng (hereinafter “Cheng”)?

ARGUMENTS

1. The rejection of claims 8 and 15 under 35 U.S.C. 102(b) based upon Cheng is not proper, because Cheng does not teach a “post-load image” as the term is specifically defined in the claims and in the context of additional, specific claim limitations.

The Final Office Action applies Cheng for teaching about a system that permits users to select from among diverse software applications. The Final Office Action, item 6, page 10, in reply to Appellant’s argument that the claimed “post-load image” of the present application is not just a software application as taught by Cheng, asserts that a post-load image, as recited in claims 8 and 15, is “an image, just like any software product.” Applicant submits that the assertion is unfounded, since the claims specifically limit the meaning of the claimed “post-load image.”³ Further, the claims state the term “post-load image” in a specific context of additional limitations that Cheng does not teach or suggest.

The Final Office Action further asserts, in item 6, page 10, that “Based on the type of software product . . . *any combination of all the necessary software may as well be packaged together*” (emphasis added). Applicant submits that this conclusory statement is not dispositive of the issue at hand. A requirement of examination of claimed combinations in patent applications is to determine what has *actually* been previously taught, particularly for

³ Claim 8 will herein be discussed. However, it should be understood that claim 15 includes essentially the same language, so that the argument applies to both claims.

rejections under 35 USC. 102. MPEP 2131, citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) for the proposition that “‘The identical invention must be shown in as complete detail as is contained in the ... claim.’”

Claim 8, as amended prior to the Final Office Action, specifically limits the term “post-load images,” by reciting “the respective post-load images *being substantially identical to respective images resulting on a target computer system hard drive from an installation process of corresponding pre-load images, so that the respective post-load images include software application configuration information, files from the corresponding pre-load images, and links to drivers for hardware of the target system*” (emphasis added).

In addition, claim 8, as examined ⁴ and as amended herein to correct antecedent basis, specifically introduces this limitation by stating “the first computer system has a *pre-built array of post-load images* stored thereon for combinations of hardware and the software that the user may select” (emphasis added).

In addition, claim 8, as amended prior to the Final Office Action, specifically recites “receiving from the user a selection of software applications for deploying to a target computer system” and “receiving from the user a selection of hardware for the target system and responsively determining what drivers correspond to the indicated hardware” and “*selecting a certain one of the pre-built images* by the first computer system responsive to the received user selections, *wherein the selected image has the software applications selected by the user and the drivers for the hardware selected by the user*” (emphasis added).

These claim limitations clearly describe something different than just any software product. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP 2143.03 (citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). Cheng does not teach, or even suggest, all the limitations of what is claimed.

⁴ As described at page 4 herein above, the Final Office Action, item 3, pages 2-3, paraphrased the language of claim 8, reciting (in relevant part), “wherein the computer system has an array of pre-built, *post-load images* . . . stored thereon for combinations of hardware and the software that the user may select” (emphasis added).

Specifically, the Final Office Action, item 3, pages 2-3, relies upon Cheng's teaching at col. 6, lines 31-40, which is about a system for updating diverse software products, for rejecting the claimed "respective post-load images being substantially identical to respective images resulting on a target computer system hard drive from an installation process of corresponding pre-load images, so that the respective post-load images include software application configuration information, files from the corresponding pre-load images, and links to drivers for hardware of the target system." However, the cited passage merely states, in relevant part, that "Each software vendor computer 103 coupled to the service provider computer 102 stores software update information, software products, information files, and the like. The software update information includes applications, binary files, text files, and the like, for updating software products installed on client computers 101 . . . " Based on the overall context of Cheng, Appellant submits that the cited passage describes is conventional updating done by downloading pre-load images. For example, Cheng col. 3, lines 40-51, discloses the following:

The user selects various software updates for installing on the client computer. Either the client application or the service provider computer then uses the network location specified in the database to connect to the computer system of the software vendor and download the software update from there to the client computer. The client application uses the format information to determine the appropriate installation process associated with the software update, and installs the software update using the proper installation process. During the installation process, the client application monitors all changes made to the client computer, such as the deletion, addition, or alteration of files or directories . . .

That is, the description of *the client application installing the software update with an appropriate installation process and the client application monitoring file or directory alterations* in this passage indicates that Cheng's disclosed updating is done by downloading and then installing pre-load images, as is conventional.

Thus, Cheng teaches what Appellant has acknowledged in the "Background" section of the present application, i.e., conventional software installation by downloading pre-load images, and does not teach that the "software update information, software products, information files, and the like" are "post-load images . . . substantially identical to respective images resulting on a target computer system hard drive from an installation process of corresponding pre-load images, so that the respective post-load images include software

application configuration information, files from the corresponding pre-load images, and links to drivers for hardware of the target system,” as recited in claim 8 of the present application..

The Final Office Action, item 3, pages 2-3, relies upon Cheng’s teaching at col. 6, lines 11-30, which is about a system for updating diverse software products, for the claimed computer system recited in claim 8 that has “an array of pre-built, *post-load images/* executables stored thereon for combinations of hardware and the software that the user may select” (emphasis added). However, the cited passage merely states the following:

Referring now to FIG. 1, there is shown the architecture of one embodiment of a system for updating diverse software products on user’s computers in accordance with the present invention. In system 100, there are a plurality of client computers 101 communicatively coupled by a network 106 to a service provider computer 102. A number of software vendor computers 103 are also communicatively coupled over the network 106 to the service provider computer 102. The network 106 is preferably the Internet, or other similar wide area network.

Each client computer 101 is operated by an end user, and typically has a number of software products installed thereon, such as applications, drivers, utilities and the like. In accordance with the present invention, the client computers 101 includes a client application 104 that communicates with the service provider computer 102 to obtain software updates of software products installed on the client computer 101. The software architecture of a client computer 101 and client application 104 is further described below with respect to FIG. 7.

While this describes client computers 101 coupled to software vendor computers 103 and describes that the client computers 101 have applications and drivers on them, it does not teach “an array of pre-built, post-load images ” stored on a service provider’s computer “for combinations of hardware and the software that the user may select,” as recited in amended claim 8.

The Final Office Action relies upon Cheng’s teaching at col. 7, lines 62-64 and FIG. 4, which is about displaying the list of applicable software, for rejecting the claimed “selecting a certain one of the pre-built images by the first computer system responsive to the received user selections, wherein the selected image has the software applications selected by the user and the drivers for the hardware selected by the user.” However, the cited passage merely states the following:

The client application 104 displays 206 the list of applicable software updates to the user, for review and selection thereof of updates for purchase and installation. FIG. 4 illustrates a sample user interface display 400 of applicable software updates.

This does not teach “pre-built images” where the pre-built images are limited as recited in amended claim 8 and discussed herein above, i.e., pre-built, post-load images.

2. The rejection of claims 13 and 20 under 35 U.S.C. 102(b) based upon Cheng is not proper, because Cheng does not teach *presenting, responsive to a received user or order identifier, a list of suggested software programs for a second order in addition to those of a first order, as recited in the context of specific claim limitations.*

The Final Office Action relies upon Cheng’s teaching at col. 7, lines 64-66 and FIG’s 2 and 4, which is about *software updates*, for rejecting the claimed “presenting, responsive to the user or order identifier, a list of *suggested software programs* for the second order in addition to those of the first order” (emphasis added).⁵ That is, the cited passage from Cheng is in the context of a preceding statement, at Cheng, col. 7, lines 40-57, “The client application 104 then analyzes 204 the client computer 101 to determine a list of installed software products. . . . For each of the installed software products on the list, the client application 104 determines 205 if there is an applicable, or relevant update for the software product.” And the cited passage at col. 7, lines 64-66, states “The client application 104 displays 206 the list of applicable *software updates* to the user, for review and selection thereof of updates for purchase and installation. FIG. 4 illustrates a sample user interface display 400 of applicable software updates. This display 400 includes the name 401 of each software product identified on the client computer 101 . . .”

In contrast, prior to dependent claim 13, claim 8 recites “receiving a first order from the user for the certain image of the selected software applications.” Then dependent claim 13 recites “presenting . . . a list of suggested software programs for the second order *in addition to those of the first order*” (emphasis added). Applicant submits that a “list of suggested software programs” for a second order that “is in addition to those of the first order,” which was “a selection of software applications” that were “receiv[ed] from the user,” as recited in

⁵ Claim 13 will herein be discussed. However, it should be understood that claim 20 includes essentially the same language, so that the argument applies to both claims.


claims 8 and 13 of the present application, is not anticipated by teaching of Cheng about “determin[ing] a list of installed software products” and “For each of the installed software products on the list . . . display[ing] 206 . . . applicable *software updates* to the user.”

Indeed, in the claims of the present application a clear distinction is made between “updates” and “programs.” That is, claim 12 in the present application recites “presenting . . . a list of suggested *updates* for the software *programs* of the first order” (emphasis added). In order to give full weight to all the words of the claims, the term “software program” must be construed as different from “software updates.” See, for example, Robert C. Kahl, “Patent Claim Construction,” Aspen Publishers, 2007, 4.03[F] (quoting from Comark Communications Inc. v. Harris Corp., 156 F. 3d 1182, 48 USPQ2d 1101, 1105 (Fed. Cir. 1998)). Consequently, “suggested software programs . . . in addition to those of the first order,” as recited in claim 13, are not “software updates,” as recited by claim 12 and taught by Cheng. However, the Final Office Action conflates the two. See Final Office Action, page 7, last paragraph (misquoting claims 13 and 20 by reciting “a list of suggested updates for the software programs.”).

REQUEST FOR ACTION

For the above reasons, Appellant contends the invention defined in independent claims 8 and 15 is patentably distinct and that dependent claims 10-14 and 16-20 are allowable at least because they depend upon respectively allowable independent claims 8 or 15. In addition, Appellant contends that the inventions defined in dependent claims 13 and 20 are also further patentably distinct for the above reasons. Appellant requests that the Board grant allowance and prompt passage of the application to issuance.

Respectfully submitted,

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APPENDIX "AA" CLAIMS

1-7. (canceled)

8. (currently amended) An apparatus for deploying software, comprising:

a processor;

a memory for storing program instructions executable by the processor to perform the steps of:

providing a Web site on a first computer system coupled to a network
for presenting a user with an interface;

receiving from the user a selection of software applications for
deploying to a target computer system;

receiving from the user a selection of hardware for the target system
and responsively determining what drivers correspond to the indicated
hardware, wherein the first computer system has a pre-built array of post-load
~~software~~ images stored thereon for combinations of hardware and the software
that the user may select, the respective post-load images being substantially
identical to respective images resulting on a target computer system hard drive
from an installation process of corresponding pre-load images, so that the
respective post-load images include software application configuration
information, files from the corresponding pre-load images, and links to drivers
for hardware of the target system;

selecting a certain one of the pre-built images by the first computer
system responsive to the received user selections, wherein the selected image
has the software applications selected by the user and the drivers for the
hardware selected by the user;

receiving a first order from the user for the certain image of the selected
software applications deployable to the target computer system hardware, including a
selection by the user of a method for delivery of the selected image; and

sending the user a loading utility with the selected image, wherein such a
loading utility enables transferring the post-load image to the target computer system

APPENDIX "AA" CLAIMS

without relying on the target computer system having an operating system shell or boot diskette, and wherein responsive to execution of the loading utility by the target computer system, the target computer system erases the hard drive and transfers the post-load image to the target computer system.

9. (canceled)

10. (previously presented) The apparatus of claim 8, wherein the sending of the loading utility with the selected image further includes sending the loading utility on bootable media, and wherein the utility further includes instructions for causing the target system to transfer the image to a hard drive of the system responsive to the target system booting to the utility on the bootable media when the target system is turned on.

11. (previously presented) The apparatus of claim 8, wherein the program instructions are executable by the processor to perform the further steps of:

maintaining a record of the order for the software applications and drivers included in the certain image that is sent, wherein the record is associated with an order identifier and user identifier;

receiving a second order for the user, including the user or order identifier;

retrieving the record for the first order responsive to the user or order identifier;

presenting a list of the software applications and drivers included in the certain image that was sent for the first order; and

receiving a selection indicating ones of the software programs of the first order to update for the second order or indicating software programs for the second order in addition to those of the first order.

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12. (previously presented) The apparatus of claim 8, wherein the program instructions are executable by the processor to perform the further steps of:

maintaining a record of the order for the software applications and drivers included in the certain image that is sent, wherein the record is associated with an order identifier and user identifier;

receiving a second order for the user, including the user or order identifier;

retrieving the record for the first order responsive to the user or order identifier;

and

presenting, responsive to the user or order identifier, a list of suggested updates for the software programs of the first order.

13. (previously presented) The apparatus of claim 8, wherein the program instructions are executable by the processor to perform the further steps of:

maintaining a record of the order for the software applications and drivers included in the certain image that is sent, wherein the record is associated with an order identifier and user identifier;

receiving a second order for the user, including the user or order identifier;

retrieving the record for the first order responsive to the user or order identifier;

and

presenting, responsive to the user or order identifier, a list of suggested software programs for the second order in addition to those of the first order.

14. (previously presented) The apparatus of claim 8, wherein the program instructions are executable by the processor to perform the further steps of:

maintaining a record of the order for the software applications and drivers included in the certain image that is sent, wherein the record is associated with an order identifier and user identifier;

receiving a second order for the user, including the user or order identifier;

retrieving the record for the first order responsive to the user or order identifier;

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receiving user information that informs the computer system about needs of the user;
maintaining a profile of the user, wherein the profile is associated with the user
identifier and the received user information; and

presenting, responsive to the user information, a list of suggested updates for the
software programs of the first order or a list of suggested software programs for the second
order in addition to those of the first order.

15. (currently amended) A computer program product, stored on a physical, computer
readable medium, for deploying software, said computer program product having instructions
for execution by a computer, wherein the instructions cause the computer to implement a
method when executed by the computer, the computer program product comprising:

instructions for providing a Web site on a first computer system coupled to a network
for presenting a user with an interface;

instructions for receiving from the user a selection of software applications for
deploying to a target computer system;

instructions for receiving from the user a selection of hardware for the target system
and responsively determining what drivers correspond to the indicated hardware, wherein the
first computer system has a pre-built array of post-load software images stored thereon for
combinations of hardware and the software that the user may select, the respective post-load
images being substantially identical to respective images resulting on a target computer
system hard drive from an installation process of corresponding pre-load images, so that the
respective post-load images include software application configuration information, files from
the corresponding pre-load images, and links to drivers for hardware of the target system;

instructions for selecting a certain one of the pre-built images by the first computer
system responsive to the received user selections, wherein the selected image has the software
applications selected by the user and the drivers for the hardware selected by the user;

instructions for receiving a first order from the user for the certain image of the
selected software applications deployable to the target computer system hardware, including a
selection by the user of a method for delivery of the selected image; and

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instructions for sending the user a loading utility with the selected image, wherein such a loading utility enables transferring the post-load image to the target computer system without relying on the target computer system having an operating system shell or boot diskette, and wherein responsive to execution of the loading utility by the target computer system, the target computer system erases the hard drive and transfers the post-load image to the target computer system.

16. (previously presented) The computer program product of claim 15, further comprising:

instructions for receiving a first order from the user for the certain image of the selected software applications deployable to the target system hardware, including a selection by the user of a method for delivery of the selected image; and

instructions for sending the user a loading utility with the selected image, wherein such a loading utility enables transferring the image to the target computer system without relying on the target computer system having an operating system shell or boot diskette.

17. (previously presented) The computer program product of claim 16, wherein the sending of the loading utility with the selected image further includes sending the loading utility on bootable media, and wherein the utility further includes instructions for causing the target system to transfer the image to a hard drive of the target system responsive to the target system booting to the utility on the bootable media when the target system is turned on.

18. (previously presented) The computer program product of claim 16, further comprising:

instructions for maintaining a record of the order for the software applications and drivers included in the certain image that is sent, wherein the record is associated with an order identifier and user identifier;

instructions for receiving a second order for the user, including the user or order identifier;

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instructions for retrieving the record for the first order responsive to the user or order identifier;

instructions for presenting a list of the software applications and drivers included in the certain image that was sent for the first order; and

instructions for receiving a selection indicating ones of the software programs of the first order to update for the second order or indicating software programs for the second order in addition to those of the first order.

19. (previously presented) The computer program product of claim 16, further comprising:

instructions for maintaining a record of the order for the software applications and drivers included in the certain image that is sent, wherein the record is associated with an order identifier and user identifier;

instructions for receiving a second order for the user, including the user or order identifier;

instructions for retrieving the record for the first order responsive to the user or order identifier; and

instructions for presenting, responsive to the user or order identifier, a list of suggested updates for the software programs of the first order.

20. (previously presented) The computer program product of claim 16, further comprising:

instructions for maintaining a record of the order for the software applications and drivers included in the certain image that is sent, wherein the record is associated with an order identifier and user identifier;

instructions for receiving a second order for the user, including the user or order identifier;

instructions for retrieving the record for the first order responsive to the user or order identifier; and

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instructions for presenting, responsive to the user or order identifier, a list of suggested software programs for the second order in addition to those of the first order.

21. (previously presented) The computer program product of claim 16, further comprising:

instructions for maintaining a record of the order for the software applications and drivers included in the certain image that is sent, wherein the record is associated with an order identifier and user identifier;

instructions for receiving a second order for the user, including the user or order identifier;

instructions for retrieving the record for the first order responsive to the user or order identifier;

instructions for receiving user information that informs the computer system about needs of the user;

instructions for maintaining a profile of the user, wherein the profile is associated with the user identifier and the received user information; and

instructions for presenting, responsive to the user information, a list of suggested updates for the software programs of the first order or a list of suggested software programs for the second order in addition to those of the first order.

APPENDIX "BB" EVIDENCE

NONE.

APPENDIX "CC" RELATED PROCEEDINGS

NONE.